

23 SEP 2002

**CERTIFICATE OF MAILING**  
**37 C.F.R. § 1.8**

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September 18, 2002

Date \_\_\_\_\_

Shelley P.M. Fussey

# PATENT

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Sunil Ahuja, Enrique Gonzalez, Srinivas

Mummidi, Matthew Dolan and Mike Bamshad

Serial No.: 10/089,595

Filed: March 29, 2002

For: Screening for Disease Susceptibility

## By Genotyping the CCR5 and CCR2 Genes

§§§§§§§§§§

Group Art Unit: Unknown

Examiner: Unknown

Atty. Dkt.: 4003.001600

## **INFORMATION DISCLOSURE STATEMENT**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

In compliance with the duty of disclosure under 37 C.F.R. § 1.56, it is respectfully requested that this Information Disclosure Statement be entered and the documents listed on attached Form PTO-1449 be considered by the Examiner and made of record in the present case. Copies of the listed documents required by 37 C.F.R. § 1.98(a)(2) are enclosed for the convenience of the Examiner.

In accordance with 37 C.F.R. §§ 1.97(g),(h), this Information Disclosure Statement is not to be construed as a representation that a search has been made, and is not to be construed to be an admission that the information cited is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

The present Information Disclosure Statement is being filed for the receipt of a first Official Action reflecting an examination on the merits, and hence is timely filed in accordance with 37 C.F.R. § 1.97(b). No fees are believed to be due in connection with the filing of this Information Disclosure Statement, however, should any fees under 37 C.F.R. §§ 1.16 to 1.21 be deemed necessary for any reason relating to these materials, the Assistant Commissioner is hereby authorized to deduct said fees from Williams, Morgan & Amerson, P.C., Deposit Account No. 50-0786/4003.001800.

Respectfully submitted,



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Date: September 18, 2002

Form PTO-1449 (modified)

Atty. Docket No.

4003.001600

Serial No.

10/089,595

List of Patents and Publications for Applicant's

INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

Applicant  
Ahuja *et al.*

Filing Date:

March 28, 2002

Group:

U.S. Patent Documents

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Foreign Patent Documents

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Other Art

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## U.S. Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.

## Foreign Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Country	Class	Sub Class	Translation Yes/No
	B1	WO 01/12857	Feb. 22, 2001	PCT			
	B2	WO 99/09162	Feb. 25, 1999	PCT			
	B3	WO 99/23253	May 14, 1999	PCT			
	B4	WO 98/05798	Feb. 12, 1988	PCT			

## Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
	C1	Daly <i>et al.</i> , "High-Resolution Haplotype Structure in the Human Genome," <i>Nature Genetics</i> , 29:229-232, 2001.
	C2	Dean <i>et al.</i> , "Genetic Restriction of HIV-1 Infection and Progression to AIDS by a Deletion Allele of the <i>CCR5</i> Structure Gene," <i>Science</i> , 273:1856-1862, 1996.
	C3	Garred <i>et al.</i> , "CC Chemokine Receptor 5 Polymorphism in Rheumatoid Arthritis," <i>J. Rheumatol.</i> , 25(8):1462-1465, 1998.
	C4	Gomez-Reino <i>et al.</i> , "Association of Rheumatoid Arthritis with a Functional Chemokine Receptor, <i>CCR5</i> ," <i>Arthritis &amp; Rheumatism</i> , 42(5):989-992, 1999.
	C5	Gonzalez <i>et al.</i> , "Global Survey of Genetic Variation in <i>CCR5</i> , <i>RANTES</i> , and <i>MIP-1<math>\alpha</math></i> : Impact on the Epidemiology of the HIV-1 Pandemic," <i>PNAS</i> , 98(9):5199-5204, 2001.
	C6	Gonzalez <i>et al.</i> , "Race-Specific HIV-1 Disease-Modifying Effects associated with <i>CCR5</i> Haplotypes," <i>PNAS</i> , 96(21):12004-12009, 1999.
	C7	Hall <i>et al.</i> , "Association of <i>CCR5</i> $\Delta$ 32 with Reduced Risk of Asthma," <i>The Lancet</i> , 354:1264-1265, 1999.
	C8	Helms, " <i>CCR5</i> - $\Delta$ 32 Polymorphism in Asthma," <i>The Lancet</i> , 357:802, 2001.

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EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

Form PTO-1449 (modified)		Atty. Docket No. 4003.001600	Serial No. 10/089,595
List of Patents and Publications for Applicant's  INFORMATION DISCLOSURE STATEMENT  (Use several sheets if necessary)		Applicant Ahuja <i>et al.</i>	
		Filing Date: March 28, 2002	Group:
U.S. Patent Documents <i>See Page</i>	Foreign Patent Documents <i>See Page 1</i>	Other Art <i>See Page 1-3</i>	

### Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
	C9	Jiang <i>et al.</i> , "Chemokine Receptor Expression in Cultured Glia and Rat Experimental Allergic Encephalomyelitis," <i>J. Neuroimmunol.</i> , 86:1-12, 1998.
	C10	Johnson <i>et al.</i> , "Haplotype Tagging for the Identification of Common Disease Genes," <i>Nature Genetics</i> , 29:233-237, 2001.
	C11	Karpas <i>et al.</i> , "Are Anti-HIV Drugs an Effective Treatment," <i>Nature Medicine</i> , 3(10):1052-1053, 1997.
	C12	Kostrikis <i>et al.</i> , "A Polymorphism in the Regulatory Region of the CC-Chemokine Receptor 5 Gene Influences Perinatal Transmission of Human Immunodeficiency Virus Type 1 to African-American Infants," <i>J. Virol.</i> , 73(12):10264-10271, 1999.
	C13	Liu <i>et al.</i> , "Homozygous Defect in HIV-1 Co receptor Accounts for Resistance of Some Multiple-Exposed Individuals to HIV-1 Infection," <i>Cell</i> , 86:367-377, 1996.
	C14	Mangano <i>et al.</i> , "Concordance Between the CC Chemokine Receptor 5 Genetic Determinants that Alter Risks of Transmission and Disease Progression in Children Exposed Perinatally to Human Immunodeficiency Virus," <i>J. Infect. Disease</i> , "183:1574-1585, 2001.
	C15	Martin <i>et al.</i> , "Genetic Acceleration of AIDS Progression by a Promoter Variant of <i>CCR5</i> ," <i>Science</i> , 282:1907-1911, 1998.
	C16	McDermott <i>et al.</i> , "CCR5 Promoter Polymorphism and HIV-1 Disease Progression," <i>The Lancet</i> , 352:866-870, 1998.
	C17	Mummidi <i>et al.</i> , "Evolution of Human and Non-Human Primate CC Chemokine Receptor 5 Gene and mRNA," <i>J. Biol. Chem.</i> , 275(25):18946-18961, 2000.
	C18	Mummidi <i>et al.</i> , "Genealogy of the <i>CCR5</i> Locus and Chemokine System Gene Variants Associate with Altered Rates of HIV-1 Disease Progression," <i>Nature Medicine</i> , 4(7):786-793, 1998.
	C19	Mummidi <i>et al.</i> , "The Human CC Chemokine Receptor 5 ( <i>CCR5</i> ) Gene," <i>J. Biol. Chem.</i> , 272(49):30662-30671, 1997.
	C20	Nguyen <i>et al.</i> , "Phenotypic Expressions of <i>CCR5</i> - $\Delta$ 32/ $\Delta$ 32 Homozygosity," <i>JAIDS</i> , 22:75-82, 1999.
	C21	Sabbe <i>et al.</i> , "Donor- and Ligand-Dependent Differences in C-C Chemokine Receptor 5 Reexpression," <i>J. Virol.</i> , 75(2):661-671, 2001.

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Exam. Init.	Ref. Des.	Citation
	C22	Samson <i>et al.</i> , "Resistance to HIV-1 Infection in Caucasian Individuals Bearing Mutant Alleles of the CCR-5 Chemokine Receptor Gene," <i>Nature</i> , 382:722-725, 1996.
	C23	Segerer <i>et al.</i> , "Expression of Chemokines and Chemokine Receptors During Human Renal Transplant Rejection," <i>Am. J. Kidney Diseases</i> , 37(3):518-531, 2001.
	C24	Tang <i>et al.</i> , "Allelic Variants of Human Beta-Chemokine Receptor 5 (CCR5) Promoter: Evolutionary Relationships and Predictable Associations with <i>HIV-1</i> Disease Progression," <i>Genes and Immunity</i> , 1:20-27, 1999.
	C25	Tran <i>et al.</i> , "Induction of Experimental Autoimmune Encephalomyelitis in C57BL/6 Mice Deficient in Either the Chemokine Macrophage Inflammatory Protein-1 $\alpha$ or its CCR5 Receptor," <i>Eur. J. Immunol.</i> , 30:1410-1415, 2000.
	C26	International Search Report for PCT Application Serial No. PCT/US00/28158, June 28, 2001.

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